

THE LEPIDOPTERA OF EBOR SCRUB, N.S.W.

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Ebor is a small township, fifty miles north-north-east of Armidale, in the New England district of New South Wales. Situated on the edge of the New England Plateau, at an altitude of 4,000 feet, it has an abundant rainfall, and is watered by many creeks, which run through deep gullies, carved in the edge of the Range, into the head-waters of the Clarence River. The road from Armidale runs over granite-country, which gradually becomes rougher in character, until it passes through some granite-hills, locally known as the "Snowies," where snow falls and lies for some days, several times in each winter. Shortly before reaching Ebor, one passes into a rich, red-soiled, basaltic area, which grows good crops of potatoes. Walking some five or six miles towards the south-east, across poor granite-country, one comes again to the basalt, which forms a bold spur, known as "Thompson's Lookout," 4,500 feet in height, from which there is a magnificent view of very rugged, densely forested hills and gullies, which contain the sources of the Bellinger River. The lepidoptera of this plateau are akin to the Victorian fauna, the most conspicuous examples being large, showy species of the Geometrid genus *Cidaria*. To the right of the track, for about one mile before reaching the "Lookout," there is a wide, but deep gully, filled with scrub-vegetation. It is something of a surprise to come upon large trees of apparently tropical vegetation, at an altitude of 4,000 to 4,500 feet, where snow falls in winter. But a closer inspection shows that many characteristic trees of the coastal scrubs of New South Wales and Queensland are absent. I saw no figs, no nettle-trees, no trees with buttressed trunks; while the large trees appeared to be referable to few species. Large, cable-stemmed climbers were also not seen, though there were

a few of small dimensions. The undergrowth consists largely of ferns, including dense groves of tree-ferns. The stems of all the trees are thickly coated with green moss, and not these only, but the lower branches, and even small twigs, are bearded with moss six to eight inches long, and with foliaceous lichens. As might be expected, the lepidoptera of this scrub are not numerous in individuals; and those found were mostly small and inconspicuous. Collecting in a scrub is exciting, as one is by no means sure of catching every example that flies up, many, especially the larger and stronger fliers, disappearing in the undergrowth, where they cannot be followed. But it was specially exciting in this instance, for the fauna appeared to be entirely new. In six strides, one left the Victorian fauna behind, and every species captured appeared to be new to science. It was like landing on an isolated, oceanic island, none of whose animals had ever before been seen by man.

I was able to collect in this scrub for three afternoons, and obtained some 30 species of lepidoptera belonging to the following groups:—

ARCTIADÆ :	<i>Lithosiæ</i>	2 species.
GEOMETRIDÆ :	<i>Larentiæ</i>	1 „
	<i>Boarmianæ</i>	1 „
PYRALIDÆ :	<i>Pyralinæ</i>	1 „
TORTRICIDÆ :	<i>Tortricinæ</i>	4 „
	<i>Eucosmidæ</i>	2 „
TINEIDÆ :	<i>Gelechiæ</i>	2 „
	<i>Ecophorinæ</i>	14 „
	<i>Heliodininæ</i>	1 „
	<i>Gracilariæ</i>	1 „
	<i>Hyponomeutinæ</i>	1 „
	<i>Tineinæ</i>	1 „
		<hr/> 31 species.

The general aspect of the lepidoptera reminded me of those taken on Mount Tambourine, Southern Queensland, at a considerably lower elevation, not quite 2,000 feet. I did not,

however, find more than two species common to the two localities. One species of *Gelechianæ*, which is a doubtful member of the fauna, as I may have taken it at the edge of the scrub, and the species of *Heliodininæ*, which is allied to *Stathmopoda*, I shall not describe at present; but the others will be dealt with here. The types are in my collection. I hope to be able to revisit this interesting and productive locality, and make further additions to its lepidopterous fauna. My captures were made on January 7th, 9th, and 11th, 1914.

Fam. ARCTIADÆ.

Subfam. LITHOSIANÆ.

Gen. TRISSOBROCHA, nov.

τρισοβροχος, with threefold noose.

Frons smooth. Tongue developed. Palpi moderate, recurved, ascending, slender, smooth-scaled; terminal joint about half second, acute. Antennæ of ♂ simple, slightly laminate towards apex, moderately ciliated. Thorax smooth above and beneath. Posterior tibiæ with two pairs of long spurs. Forewings with all veins present in both sexes, 2 from $\frac{3}{4}$, 3 from before angle, 4 from angle, 7, 8, 9 stalked, 9 arising before 7, 10 from before angle, well separated at origin from 7, 8, 9, 11 free. Hindwings with all veins present, 3 and 4 connate, 5 from below middle of discocellulars, curved toward 4 at origin, 6 and 7 stalked, 8 from cell at $\frac{1}{3}$.

Allied to *Hectobrocha*, but more primitive in structure. In that genus, vein 5 is absent in ♂ (but not in ♀), and 10 is from a point with 7, 8, 9.

TRISSOBROCHA EUGRAPHICA, n.sp.

εὐγραφικός, clearly inscribed.

♂. 22 mm. Head white. Palpi dark fuscous. Antennæ grey, towards base tinged with ochreous, basal joint white; in ♂ evenly and moderately ciliated(1) Thorax white, a transverse line behind tegulæ crossing bases of patagia, and a posterior spot black. Abdomen whitish-ochreous, tuft ochreous; beneath dark fuscous towards base. Legs pale ochreous;

anterior pair fuscous anteriorly; a fuscous spot on apex of middle tibiæ. Forewings triangular, costa strongly arched, apex round-pointed, termen slightly curved, oblique; clear pale ochreous; markings black; a broad line from base of costa not reaching beyond middle; a dot on $\frac{1}{4}$ costa, a sharply dentate line from $\frac{1}{4}$ costa to $\frac{1}{4}$ dorsum; a circular pale-centred median discal spot; a dentate line from $\frac{3}{4}$ costa to $\frac{3}{4}$ dorsum, bent outwards beneath costa, and inwards in disc; a faint interrupted dentate subterminal line, several suffused spots on termen; cilia ochreous with a few dark fuscous scales. Hindwings with termen gently rounded; pale ochreous; a faint suffused fuscous subterminal line; cilia pale ochreous. Under-side similar but less defined.

One specimen.

THALLARCHA EROTIS, n.sp.

έρωτις, a darling.

♂. 18 mm. Head pale ochreous; face fuscous-whitish. Palpi 1; dark fuscous. Antennæ fuscous, basal joint pale ochreous; in ♂ with short pectinations(1) and longer ciliations(2). Thorax fuscous, tegulæ pale ochreous, apex of patagia and a posterior spot whitish. Abdomen ochreous-whitish, with some fuscous suffusion towards apex, tuft and underside ochreous. Legs ochreous; dorsal surface of anterior and posterior pairs fuscous. Forewings elongate-ovate, costa strongly arched, apex rounded, termen obliquely rounded; white; markings fuscous; an ochreous suffusion at base, on basal half of costa, above mid-dorsum, and edging some of the markings; a thick line on costa to $\frac{1}{8}$ continued narrowly to middle; an outwardly curved wavy line from $\frac{1}{8}$ costa to $\frac{1}{4}$ dorsum; three fine parallel lines from costa between $\frac{1}{8}$ and middle, outwardly toothed beneath costa, thence inwardly curved, and confluent on mid-dorsum, leaving a clear white dorsal blotch between them and basal line; a fuscous blotch in disc at $\frac{3}{5}$ connected by a line with dorsum at $\frac{3}{4}$; a large spot on $\frac{4}{5}$ costa; a subapical spot on termen; a large tornal blotch enclosing a white spot on termen; cilia pale ochreous, on apex

white, on subapical spot and again on midtermen fuscous. Hindwings with termen evenly rounded; pale ochreous; cilia pale ochreous.

One specimen.

Fam. GEOMETRIDÆ.

Subfam. L A R E N T I A N Æ.

DIPLOCTENA PANTCEA Turn.

One ♂; although wasted, I do not think there is any doubt as to the identification. This species is recorded previously from Lorne, Victoria, where a series was taken by Mr. Geo. Lyell.

Subfam. B O A R M I A N Æ.

Gen. PHILOLOCHMA, nov.

φιλολοχμος, loving the thickets.

Frons flat. Tongue well-developed. Palpi moderately long, porrect or slightly ascending; second joint densely clothed with rough hairs; terminal joint moderate, obtuse. Antennæ in ♂ thickened, simple, minutely ciliated. Thorax not crested, hairy beneath. Abdomen not crested. Femora hairy. Posterior tibiæ in ♂ dilated, with all spurs present. Forewings in ♂ without fovea, but with a small triangular patch bare of scales in situation of fovea; 10 and 11 arising from cell and not anastomosing. Hindwings with 3 and 4 separate, 6 and 7 separate.

PHILOLOCHMA CELENOCHROA, n.sp.

κελαινοχροος, darkly coloured.

♂. 29 mm. Head fuscous-ochreous. Palpi 2; fuscous-ochreous. Antennæ dorsally grey, laterally brownish; ciliations in ♂ $\frac{1}{3}$. Thorax fuscous-ochreous. Abdomen fuscous; dorsum of first two segments and underside fuscous-ochreous. Legs fuscous irrorated and tarsi annulated with fuscous. Forewings triangular, costa strongly arched near base, thence

nearly straight to near apex, apex rounded, termen bowed, moderately oblique; whitish-ochreous, thickly strigulated with dark fuscous, and suffused with orange-ochreous along veins; markings dark fuscous; a moderate fascia from $\frac{1}{6}$ costa to before mid-dorsum; a second fascia from before midcosta to beyond mid-dorsum, obscure and interrupted in disc; a large triangular costal blotch from $\frac{2}{3}$ to apex containing two short fine pale lines from costa; a blotch on dorsum before tornus, continuous with second fascia, and bisected by a narrow curved pale line from dorsum; cilia pale ochreous barred with fuscous. Hindwings with termen rounded; fuscous finely strigulated with orange-ochreous; cilia pale ochreous obscurely barred with fuscous.

One specimen.

Fam. PYALIDÆ.

Subfam. PYRALINÆ.

Gen. ABOETHETA, nov.

ἀβουθητος, helpless.

Frons oblique, flat. Tongue well-developed. Labial palpi long (several times breadth of eye), porrect, thickened with dense appressed hairs above and beneath; terminal joint concealed. Maxillary palpi strongly dilated. Antennæ of ♂ thickened, subdentate, shortly ciliated. Posterior tibiæ with outer spurs about $\frac{2}{3}$ of inner. Forewings with 4 and 5 stalked, 7, 8, 9 stalked. Hindwings with 3 and 4 stalked, 7 anastomosing for half its length with 8.

Apparently nearest *Myrmidonistis* Meyr.

ABOETHETA PTERIDONOMA, n.sp.

πτεριδονομος, dwelling among ferns.

♂ ♀. 14-20 mm. Head white. Palpi dark fuscous; internal surface and apex of maxillary palpi white; labial palpi $2\frac{1}{2}$. Antennæ whitish, ciliations in ♂ $\frac{1}{5}$. Thorax whitish, slightly ochreous-tinged. Abdomen whitish-ochreous with transverse fuscous bars, tuft fuscous, underside white. Legs

white; anterior tibiæ, femora, and inner surface of coxæ fuscous. Forewings triangular, costa straight, arched towards apex, apex rounded, termen nearly straight, oblique, whitish-ochreous, on margins and veins ochreous, markings dark fuscous; a thick streak on costa to $\frac{1}{4}$, thence a narrow costal suffusion of fuscous and ochreous, with some dark fuscous costal dots; a straight thick line from $\frac{1}{4}$ costa to $\frac{1}{4}$ dorsum; a squarish median discal dot beneath costa; a doubly sinuate line from $\frac{3}{4}$ costa to beyond mid-dorsum; a fine subterminal line; a suffused fuscous longitudinal streak from first line above middle to termen below middle, thicker posteriorly, joined by a suffuse fuscous streak from apex external to second line; a streak from second line just before dorsum along dorsum to tornus; a short line on termen below middle; cilia dark fuscous, below apex and above tornus ochreous-whitish. Hindwings with termen rounded; white, towards termen ochreous-tinged; a fuscous postmedian line; a fuscous terminal line; cilia ochreous-whitish mixed with fuscous.

This delicate and fragile species was common among the ferny undergrowth. I took 20 specimens (14♂, 6♀).

Fam. TORTRICIDÆ.

Subfam. TORTRICINÆ.

CAPUA EURYOCHRA, n.sp.

εὐρυωχρος, broadly pale.

♂. 10 mm. Head, palpi, thorax, and abdomen fuscous. Antennæ grey-whitish annulated with dark fuscous; ciliations in ♂ 1. Legs whitish; anterior pair and all tarsi annulated with fuscous. Forewings elongate, suboblong; in ♂ without fold; fuscous; some dark fuscous costal dots and a larger spot at $\frac{5}{8}$; a very broad transverse ochreous-whitish fascia before middle, not reaching costal edge, leaving a broad fuscous basal patch; a dark fuscous median fascia immediately following pale fascia; cilia fuscous dotted with dark fuscous. Hindwings and cilia grey.

One specimen in fair condition.

CAPUA sp.

A small, brownish species. One ♀ example badly rubbed, and unfit for description.

TORTRIX sp.

One ♀ example, with unusually long palpi(5), too wasted for recognition.

TORTRIX PARAPLESIA, n.sp.

παπαλησιος, resembling, akin.

♀. 25 mm. Head pale fuscous-brown. Palpi moderate($2\frac{1}{2}$); pale fuscous-brown. Antennæ pale fuscous-brown, towards apex fuscous. Thorax pale fuscous-brown with a transverse fuscous line near anterior edge behind tegulæ and crossing patagia. Abdomen grey-whitish. Legs ochreous-whitish with some ochreous and fuscous irroration; tarsi annulated with fuscous; anterior femora and tibiæ fuscous on dorsal surface. Forewings oblong, costa strongly arched near base thence straight, apex rounded-rectangular, termen not oblique, rounded towards tornus; brown-whitish irrorated with reddish-brown; towards costa strigulated with fuscous; a pale fuscous spot on $\frac{1}{4}$ dorsum followed by two or three strigulations; an oblique central fascia slightly darker than ground-colour, its anterior edge defined, irregularly dentate, from $\frac{1}{3}$ costa to $\frac{2}{3}$ dorsum, its posterior edge suffused; a fuscous erect line from tornus to beyond middle of disc; three short fuscous lines or strigulæ between this and termen; cilia reddish-brown, apices whitish, bases barred with fuscous. Hindwings with termen gently rounded; grey faintly strigulated with darker grey; cilia whitish with a grey sub-basal line.

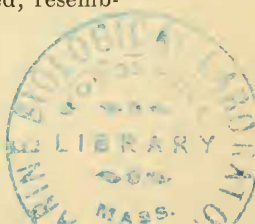
Similar to *T. sobriana* Wlk., but the palpi considerably shorter. The palpi in *T. sobriana* are $3\frac{1}{2}$.

One specimen.

Subfam. EUCOSMINÆ.

SPILONOTA sp.

One ♂ specimen, which was accidentally destroyed, resembling *S. semicanella* Wlk.



SPILONOTA DELOSHEMA, n.sp.

δηλοσχημος, with clear, distinct pattern.

♀. 12 mm. Head white. Palpi 3; fuscous, apex and inner surface whitish. Thorax white, anterior edge and a posterior spot dark fuscous, some ochreous scales in patagia. Abdomen grey. Legs grey-whitish; anterior pair, except tarsi, fuscous. Forewings narrow-oblong, costa gently arched, apex round-pointed, termen obliquely rounded; fuscous; costa with short whitish strigulations; an elongate whitish spot somewhat irregularly outlined on dorsum near base, and another similar spot on mid-dorsum, ill-defined in disc, strigulated with fuscous on dorsum, and partly suffused with ochreous; a blackish triangular blotch in disc before middle connected narrowly with dorsum between whitish spots; a sharply defined blackish blotch on dorsum before tornus, projecting into disc posteriorly; a blackish apical spot, connected with a blackish subapical blotch; from the latter proceed two silvery streaks to tornus, the intervening space suffused with ochreous; cilia fuscous, bases whitish. Hindwings and cilia grey.

One example, which buried itself in wet moss, but fortunately re-emerged, so that I was able to capture it.

Fam. TINEIDÆ.

Subfam. GELICHIANÆ.

Gen. ENCHOPTILA, nov.

ἐγχοπτίλος, with spear-shaped wing.

Head loosely scaled. Tongue feebly developed. Palpi short, slender, subascending; second joint shortly rough-haired beneath. Antennæ longer than forewings; in ♂ simple; basal joint rather stout and long, with strong pecten. Thorax not crested. Forewings elongate, costa obtusely angled; 7 and 8 stalked, 7 to costa. Hindwings slightly broader than forewings, termen sinuate; 3 and 4 coincident (4 absent), 5, 6, 7 parallel.

ENCHOPTILA IDIOPIS, n.sp.

ιδιωπης, peculiar, distinct.

♂. 14-15 mm. Head brownish; face and palpi brown-whitish. Antennæ whitish, sharply annulated, except near base, with dark fuscous. Thorax brown, apices of patagia white. Abdomen brown-whitish. Legs brown-whitish. Forewings narrow-elongate, costa slightly arched near base, thence nearly straight to $\frac{4}{5}$, where it is obtusely angled, thence straight to apex, apex acute, termen straight, extremely oblique; brown; a broad white line from mid-dorsum obliquely outwards, curved in middle of disc, and returning to tornus; apical $\frac{1}{4}$ of costa and termen narrowly white; a black apical spot sending inwards a very short longitudinal streak; cilia brownish with a brown basal line, at apex fuscous. Hindwings with termen strongly sinuate beneath apex; whitish, towards apex and termen suffused with grey; cilia whitish.

Three specimens.

Subfam. CECOPHORINÆ.

Gen. DASYCERCA, nov.

δασυκερκος, hairy-tailed.

Head smooth, sidetufte small, loosely appressed. Palpi rather short, second joint not reaching base of antennæ, smooth-scaled, terminal joint shorter, slender, recurved. Antennæ in ♂ moderately ciliated(1), basal pecten developed. Thorax smooth. Abdomen in ♂ with large dense tufts of hair from lateral aspects of fifth segment, and from dorsal aspect of succeeding segments, apical tuft well developed. Forewings elongate, termen very oblique; vein 7 to termen. Hindwings lanceolate.

A development of *Macharetis*, distinguished by the abdominal tufts of ♂.

DASYCERCA APOCRYPHA, n.sp.

ἀποκρυφος, hidden, obscure.

♂ ♀. 11-13 mm. Head and thorax whitish-ochreous. Palpi whitish-ochreous with a few fuscous scales. Antennæ fuscous.

Abdomen whitish-ochreous, sometimes suffused with purplish, in ♀ fuscous towards apex, tufts whitish-ochreous (in Tambourine examples grey). Legs whitish-ochreous; anterior and middle pairs more or less infuscated. Forewings narrow, elongate, costa moderately arched, apex pointed, termen very obliquely rounded; whitish-ochreous more or less irrorated with fuscous; in ♂ without markings, or with a single fuscous dot on fold at $\frac{1}{4}$, in ♀ usually with dots also in disc at $\frac{1}{3}$ and $\frac{2}{3}$, and a fourth dot on dorsum near tornus; cilia whitish-ochreous with fuscous irroration. Hindwings grey or whitish-grey; cilia whitish-ochreous, sometimes with a grey sub-basal line.

Nine specimens (3 ♂, 6 ♀). Also from Mt. Tambourine, in October and November (5 ♂, 1 ♀).

MACHÆRETIS HETEROPA, n.sp.

ἑτερωπος, different, unlike.

♀. 12 mm. [Head rubbed]. Palpi whitish-ochreous; terminal joint fuscous. Antennæ fuscous; basal joint whitish-ochreous. Thorax dark fuscous. Abdomen fuscous. Legs whitish-ochreous; anterior pair except tarsi fuscous; middle tibiæ and all tarsi annulated with fuscous. Forewings narrow-elongate, costa gently arched, apex round-pointed, termen very obliquely rounded; ochreous-whitish with fuscous markings; a narrow basal fascia; a costal streak extending from this to median fascia; a very broad median fascia, enclosing an ochreous-whitish spot on costa before middle, and another on dorsum beyond middle; posterior edge extending obliquely to tornus; a large apical blotch; cilia fuscous. Hindwings lanceolate; brownish-ochreous; cilia grey.

Readily distinguished by the colour of the hindwings.

One specimen.

OCYSTOLA SYMBLETA, n.sp.

συμβλητος, comparable.

♂ ♀. 15-16 mm. Head and palpi pale yellow. Antennæ whitish-ochreous, ciliations in ♂ $2\frac{1}{2}$. Thorax yellowish, ante-

rior edge fuscous. Abdomen grey, with an ochreous bar on dorsum of segments 4 to 9. Legs pale yellow; anterior pair fuscous anteriorly. Forewings suboblong, rather broad, costagently arched, apex round-pointed, termen nearly straight, moderately oblique; pale ochreous, more or less suffused with fuscous except towards base; a transversely elongate dark fuscous discal spot at $\frac{2}{3}$; base of costa fuscous; cilia yellow-ochreous, on tornus grey. Hindwings elongate-ovate; dark grey, on costa and beneath apex pale ochreous.

Allied to *O. acroxantha* Meyr. The complete absence of basal discal dots should be noticed.

Two specimens.

OCYSTOLA TANYTHRIX, n.sp.

ταρυθριξ, long-haired, in allusion to antennæ.

♂. 15 mm. Head, palpi, and thorax pale ochreous. Antennæ whitish-ochreous; ciliations in ♂ extremely long(10). Abdomen pale brownish-ochreous, apices of segments whitish. Legs whitish-ochreous; anterior pair fuscous. Forewings moderately narrow, posteriorly dilated, costa gently arched, apex round-pointed, termen nearly straight, moderately oblique; pale yellowish; a fuscous suffusion along costa; a fuscous discal dot at $\frac{1}{3}$, a second beyond it on fold, and a third at $\frac{2}{3}$; a broad fuscous terminal band not quite reaching tornus; cilia pale yellowish, on tornus fuscous. Hindwings elongate-ovate; whitish; cilia whitish.

One specimen.

CÆSYRA BATHROPHÆA, n.sp.

βαθροφαίος, with dusky base.

♂ ♀. 16-18 mm. Head ochreous-yellow. Palpi fuscous; inner surface and terminal joint ochreous. Antennæ fuscous; ciliations in ♂ 1. Thorax ochreous-yellow, bases of patagia dark fuscous. Abdomen fuscous, apices of segments ochreous-whitish. Legs fuscous; tarsi annulated with pale ochreous; posterior pair wholly pale ochreous. Forewings elongate, not dilated, costa gently arched at base, thence nearly straight,

apex rounded, termen very obliquely rounded; ochreous-yellow; markings dark fuscous; a moderate basal fascia; a dot in disc at $\frac{1}{3}$, a second on fold beyond it, a third above middle, a fourth at $\frac{2}{3}$; a scanty irroration between last dot and tornus; an inwardly oblique streak from $\frac{5}{8}$ costa, abruptly bent outwards beneath costa, and continued narrowly and interruptedly, near and parallel to termen, to tornus; cilia ochreous-yellow. Hindwings elongate-ovate; grey; cilia whitish-ochreous.

Three specimens; one wasted ♂, and two ♀ in good condition.

CÆSYRA SYNECHES, n.sp.

συνεχης, connecting.

♂. 12-15 mm. Head pale ochreous. Palpi fuscous; terminal joint whitish-ochreous. Antennæ fuscous; ciliations of ♂ 1. Thorax brownish-fuscous. Abdomen fuscous, tuft ochreous-whitish. Legs fuscous; hairs on posterior tibiæ ochreous-whitish. Forewings scarcely dilated, costa moderately arched, apex round-pointed, termen very obliquely rounded; pale brownish-fuscous, markings dark fuscous; a dot in disc at $\frac{1}{3}$, a second just beyond it on fold, and a third, much larger and transversely oval, at $\frac{2}{3}$; an ill-defined spot on midcosta; a very fine line from $\frac{5}{8}$ costa obliquely inwards, bent outwards beneath costa, and continued parallel to termen, ending in a suffused spot on tornus; cilia brown-whitish, with an ill-defined fuscous median line. Hindwings elongate-oval; grey; cilia pale grey.

A generalised form related to some species of *Machæretis*, but the hindwings are not lanceolate.

Eleven specimens, all males.

PROTOMACHA LEUCOPHARA, n.sp.

λευκοφαιρος, white-robed.

♀, 15 mm. Head white. Palpi very long, second joint much exceeding base of antennæ, shortly rough-haired towards apex above and beneath, terminal joint long, about $\frac{1}{2}$ second, slender; white, terminal joint fuscous. Antennæ fuscous. Thorax fuscous. Abdomen grey, bases of middle segments ochreous-grey. Legs

ochreous-whitish; anterior pair fuscous. Forewings elongate, slightly dilated, costa slightly arched, apex round-pointed, termen very obliquely rounded; white with suffused fuscous markings; a short streak on costa from base; discal dots at $\frac{1}{3}$ and $\frac{2}{3}$ with some fuscous irroration between; a suffused spot on fold between these and extending to tornus; an apical blotch, its anterior margin outwardly curved and extending from $\frac{4}{5}$ costa to tornus; cilia white mixed with fuscous. Hindwings whitish, towards apex whitish-grey; cilia whitish.

Two specimens.

PROTOMACHA CATHARA, n.sp.

καθαρος, spotless.

♂ 16 mm. Head white. Palpi very long, second joint extremely long, loosely rough-haired above and beneath towards apex; whitish, middle of outer surface of second joint and a sub-terminal ring fuscous, terminal joint fuscous. Thorax white. Abdomen grey, bases of segments brownish-ochreous. Legs ochreous-whitish; anterior pair fuscous. Forewings elongate, posteriorly dilated, costa slightly arched, apex round-pointed, termen obliquely rounded; shining white, towards margins very faintly ochreous-tinged; cilia white. Hindwings and cilia grey.

Smaller than *P. cara* Butl., the palpi more fuscous, and differing in their structure, which approaches more to that of the genus *Pleurota*.

One specimen.

COMPSOTROPHA PASTEODES, n.sp.

παστεωδης, speckled.

♂♀ 19-20 mm. Head white. Palpi whitish, outer aspect of second joint fuscous from base to beyond middle and again at apex. Antennæ ochreous-whitish with fine dark fuscous annulations; cilia in ♂ 3. Thorax whitish more or less mixed with fuscous. Abdomen brownish-ochreous, apices of segments grey, tuft ochreous-whitish. Legs whitish-ochreous; anterior pair fuscous; middle tibiæ and tarsi annulated with fuscous. Forewings elongate, posteriorly dilated, costa moderately arched towards base, thence nearly straight, apex round-pointed, termen

obliquely rounded; whitish, rather thickly irrorated with dark fuscous; markings dark fuscous; a spot on base of costa giving off a short subcostal streak; a spot on base of dorsum; a discal spot at $\frac{1}{3}$, a second beneath it on fold, and a third in disc at $\frac{2}{3}$; a broadly suffused line from costa before apex to midtermen, continued along termen to tornus; cilia whitish mixed with dark fuscous. Hindwings whitish-grey, towards base whitish; cilia whitish.

This species has the facies of a *Phlaeopola*, but the antennal ciliations are long, and vein 7 runs distinctly to termen. I can find no indication of thoracic crest or antennal pecten.

Two specimens, ♂♀, of which the former is in good condition.

PHILOBOTA ALYPA, n.sp.

ἄλυπος, cheerful.

♀. 17 mm. Head snow-white. Palpi white, basal half of second joint dark fuscous. Antennæ fuscous. Thorax dark fuscous, posterior edge white. Abdomen whitish, bases of segments 5 to 8 ochreous-fuscous. Legs ochreous-whitish with some fuscous suffusion; anterior pair mostly fuscous. Forewings elongate, scarcely dilated, costa moderately arched, apex round-pointed, termen very obliquely rounded; white, markings dark fuscous; an elongate spot on base of costa; a broad slightly oblique fascia from costa before middle, to dorsum beyond middle, dilated towards dorsum, its anterior edge slightly curved, posterior edge bent outwards below middle of disc; a second broad fascia from $\frac{3}{4}$ costa to termen just above tornus; a discal dot at $\frac{3}{5}$, sometimes connected with both fasciæ; a triangular subapical spot on termen; cilia pale ochreous, with some fuscous irroration on bases. Hindwings whitish, with some grey suffusion towards termen; cilia whitish-ochreous.

One specimen.

HOPLITICA MILTOPSARA, n.sp.

μυλτοψαρος, reddish-grey.

♀. 22 mm. Head ochreous-grey. Palpi whitish, apex of third joint fuscous. Antennæ ochreous-grey annulated with dark

fuscous. Thorax ochreous-fuscous. Abdomen whitish-grey obscurely barred with brownish-ochreous. Legs ochreous-whitish; femora whitish; anterior pair fuscous anteriorly, tarsi barred with whitish. Forewings suboblong, not dilated, costa rather strongly arched, apex rounded-rectangular, termen obliquely rounded; whitish-grey finely irrorated with brick-red, so as to appear reddish-grey; markings pale fuscous; costal edge whitish; a minute dot in disc at $\frac{1}{4}$, a second beyond it on fold, and a third in middle; a very slender finely dentate line from midcosta very obliquely outwards, bent at a right angle in disc, and thence curved to dorsum before tornus; a series of minute dots on apical fourth of costa and throughout termen; cilia reddish-grey, apices whitish. Hindwings and cilia grey-whitish.

One specimen.

PHLÆOPOLA CHLOREIS, n.sp.

χλωρῆς, greenish.

♂. 26-30 mm. Head and thorax ochreous-whitish. Palpi ochreous-whitish; terminal joint partly suffused with fuscous. Antennæ ochreous-whitish; ciliations in ♂ 1. Abdomen ochreous-whitish, irrorated, except at apices of segments, with fuscous. Legs ochreous-whitish; anterior pair fuscous; anterior and middle tarsi fuscous annulated with ochreous-whitish. Forewings elongate, scarcely dilated, costa strongly arched, apex rounded, termen obliquely rounded; whitish with patchy greenish suffusion, and a few scattered fuscous scales; markings dark fuscous; base of costa dark fuscous; some dark fuscous irroration beneath costa towards base; a dot in disc at $\frac{1}{4}$, a second in disc before middle, a blotch on fold beneath and between these two dots, and a rather large roundish spot in disc beyond middle; a subapical costal blotch giving off a curved line to tornus; a spot on tornus; cilia whitish, with a few fuscous scales. Hindwings whitish irrorated with grey; cilia whitish.

Recognisable by its large size, and greenish colouring. The two specimens are not in good condition; the thoracic crests are denuded, and vein 7 is below apex, but I think the species must be referred here.

Gen. EPITHYMEMA, nov.

ἐπιθυμημα, an object of desire.

Palpi very long, recurved: second joint extremely long, slightly thickened at apex, with smoothly appressed scales, slightly rougher in ♀; terminal joint slender, less than half second. Antennæ with strong basal pecten; ciliations in ♂ moderate (1). Thorax not crested. Forewings with vein 7 to apex. Hindwings elongate-ovate.

Differs from *Eulechria* in the extremely long palpi, the second joint being especially long (about 6).

EPITHYMEMA DISPARILE, n.sp.

Disparilis, dissimilar, unequal.

♂. 18-19 mm. Head ochreous-yellow. Palpi whitish-ochreous; anterior edge of terminal joint and basal half of external surface of second joint fuscous. Antennæ fuscous; ciliations in ♂ 1. Thorax orange-ochreous, anterior edge blackish. Abdomen dark fuscous, towards base ochreous-tinged, tuft pale ochreous. Legs pale ochreous, dorsal surfaces fuscous. Forewings elongate, scarcely dilated, costa nearly straight, apex rounded, termen obliquely rounded; orange-ochreous; costal edge blackish towards base; cilia orange-ochreous, on tornus dark fuscous. Hindwings ochreous, apical half suffused with dark fuscous; cilia dark fuscous with a narrow ochreous basal line on costa and apex apices broadly ochreous.

♀. 18-20 mm. Head blackish, face ochreous. Palpi blackish. Thorax blackish, outer half of patagia and two lateral stripes reddish-orange. Legs blackish; apices of coxæ and ventral surface of tarsi ochreous-whitish. Forewings reddish-orange; whole of disc, except margins and some longitudinal streaks, uniformly and more or less deeply suffused with fuscous. Hindwings with ochreous colour more restricted to base.

A remarkable form, showing sexual dimorphism, very unusual in this subfamily. Seven specimens, 5 ♂, 2 ♀.

EULECHRIA BATHROPHÆA, n.sp.

βαθροφαίος, with fuscous base.

♀. 21 mm. Head whitish, sidetufts ochreous. Palpi whitish. Antennæ fuscous. Thorax whitish, patagia dark fuscous. Ab-

domen ochreous-fuscous finely irrorated with whitish-ochreous, apices of segments whitish-ochreous. Legs ochreous-whitish; anterior pair fuscous; middle pair with some fuscous irroration. Forewings moderate, slightly dilated, costa rather strongly arched, apex round-pointed, termen obliquely rounded; whitish; costal edge faintly ochreous-tinged; markings dark fuscous; a narrow basal fascia, prolonged along costa to $\frac{1}{4}$, and along dorsum to $\frac{1}{6}$; a narrow discal mark at $\frac{1}{4}$, a second beyond it on fold, a third above middle at $\frac{3}{8}$, and a fourth rather larger in middle; the last is suffusedly connected with costa at $\frac{3}{5}$ and dorsum at $\frac{5}{8}$, forming an incomplete fascia; some minute longitudinal strigulae in terminal part of disc, on terminal part of costa, and on termen; cilia ochreous-whitish. Hindwings grey; cilia whitish-ochreous.

The basal (not subbasal) fascia is a noteworthy characteristic. One specimen.

Subfam. GRACILARIANÆ.

CYHOSTICHA BRYONOMA, n.sp.

βρυστομοσ, dwelling in moss.

♂♀. 14-16 mm. Head greenish. Palpi with a long tuft of hairs on lower surface of apex of second joint nearly as long as terminal joint; dark fuscous. Antennae whitish annulated with dark fuscous. Thorax moss-green. Abdomen dark grey, towards base paler and sometimes greenish. Legs fuscous mixed with greenish; middle tibiae with a central and an apical dense scale-tuft; middle tarsi not thickened. Forewings moss-green, with white strigulae in places, and more or less dotted with dark fuscous; costa dark fuscous, its middle half shortly strigulated with white, sometimes also some white strigulations near base; sometimes a white dot on dorsum at $\frac{1}{3}$, a second at $\frac{2}{3}$, and a third at tornus, but these are usually obsolete; cilia greenish mixed with dark fuscous, on dorsum grey. Hindwings and cilia grey.

Variable in its mimetic colouring. Six specimens (1 ♂, 5 ♀) taken, resting on moss on tree-trunks.

Subfam. HYPONOMEUTINÆ.

ZELLERIA CYNETICA Meyr.

Two specimens. Also from Brisbane, Mount Tambourine, and Killarney, Queensland; Murrurundi, Sydney, and Katoomba,

N.S.W.; Gisborne, Victoria; Launceston, Deloraine, George's Bay, and Hobart, Tasmania.

Subfam. TINEINÆ.

XYSMATODONA POLYSTONA, n.sp.

πολυστονος, sorrowful.

♀. 16 mm. Head brown-ochreous-whitish. Palpi and antennæ fuscous. Thorax and abdomen fuscous. Legs fuscous; tarsi annulated with ochreous-whitish. Forewings rather elongate, costa rather strongly arched, apex rounded, termen very obliquely rounded; ochreous-whitish densely irrorated with fuscous, markings obscure, due to absence of fuscous irroration; a large sub-basal dorsal blotch nearly reaching to costa; ill-defined costal spots at middle, $\frac{2}{3}$, and $\frac{5}{6}$; a dark fuscous spot preceding, and two following last pale spot; a broad interrupted dark fuscous terminal line; cilia fuscous. Hindwings and cilia grey.

One specimen. Veins 7 and 8 of forewings are long-stalked, 7 to termen.